Rejection of Claim 1-14 under 35 U.S.C. 102(b)

The 348 and 804 Patents do not anticipate the claims of the present invention. These references teach a retroreflective material that has a body with one smooth surface and one irregular surface. The irregular surface comprises a plurality of projections. These projections are cube corner prisms. These references do not teach or illustrate cube corner cavities, a required element of claims 1-14.

The Examiner argues that Fig. 3 teaches a recessed face layer 12, a reflective film 30, and an adhesive 34, which fills the recesses. It is this very Figure along with the associated text from the disclosure that disproves the Examiner's argument.

As is taught in these references, light enters the front surface 14 of the body portion of the article. It then strikes one of the faces of the cube corner prisms, is directed to another of the faces of the prism and is then directed out of the cube corner formation back through the body portion. See Fig. 2 and column 4, lines 40-54 of the 348 Patent.

As further taught in these references, the reflective layer is employed to enhance the reflection of light entering the body portion back through the body portion. See Column 2, line 55 to column 3, line 5 of the 348 Patent.

It is clear from these disclosures that the references do not teach the presence of a cube corner cavity. To the contrary, the references teach away from this concept, as they never allow the light to reach the adhesive coated over the backside of the article. This is due, of course, to the presence of the reflective layer on the faces of the cube corner prisms, which blocks the light and returns it back through the body.

It is also clear that the references fail to teach the use of a transparent adhesive layer that fills the cube corner cavities. At best, the references are silent with respect to the use of a transparent adhesive layer. However, since the references only use an adhesive to attach the article to a "suitable surface", and since the reference teaches that light is never passed through the adhesive, it is clear that they do not teach the use of a transparent adhesive.

In light of this discussion, it is submitted that Applicants have shown that the 348 and 804 Patents do not anticipate any of claims 1-14.

It is also submitted that the 348 and 804 Patents fail to anticipate either of claims 13 or 14 for additional reasons. With respect to claim 13, neither of the references teaches the presence of

a discontinuous reflective film. With respect to claim 14, neither of the references teaches the use of two adhesive films.

Rejection of Claims 15-21 under 35 U.S.C. 102(b)

The 219 Patent does not anticipate these claims. This reference teaches a method of making a structured sheet. In the process of making the sheet, a curable composition contacts a reflective layer. However, the curable composition does not adhere to the reflective layer. In fact, it would be contrary to the teaching of the 219 Patent for the curable composition to adhere to the reflective layer. The structures shown in Figs. 2, 3D and 3E illustrate intermediate products that can be formed to make the final product of Fig. 3F. If the curable composition adhered to the reflective layer, the final product could not be made.

In light of this discussion, it is submitted that Applicants have shown that the 219 Patent does not anticipate any of claims 15-21.

Obviousness-type Double Patenting

Applicants offer to submit a terminal disclaimer in this application should the Examiner indicate the presence of allowable subject matter.

Applicants believe that they have overcome the Examiner's rejections. They request reconsideration of the rejections and allowance of all claims.

Respectfully submitted,

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Date

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Version with markings to show amendments made:

15. A retroreflective article, comprising:

a body layer having a structured surface comprising recessed faces that define cube corner cavities;

a reflective film disposed at least on the recessed faces; and

a layer of flowable radiation-curable composition that fills the cube corner cavities and is bonded to the reflective film.

16. The article of claim 15, wherein the radiation-curable composition layer is substantially coextensive with the structured surface.

17. The article of claim 16, wherein the radiation-curable composition layer covers substantially all of the structured surface.

18. The article of claim 15, wherein the radiation-curable composition is substantially polymeric.

19. The article of claim 15, wherein the radiation-curable composition is suitable for forming a transparent pressure-sensitive adhesive.

20. The article of claim 15, wherein the radiation-curable composition has a sufficiently low shrinkage such that upon curing it maintains intimate contact with the recessed faces.

21. The article of claim 15, wherein the reflective film is discontinuous, and the radiation-curable composition is suitable for forming a covalent bond with exposed portions of the body layer.